

REMARKS

Reconsideration and withdrawal of any rejections of the application, and allowance of the claims, especially in view of the amendments and remarks made herein, are respectfully requested.

I. STATUS OF THE CLAIMS

Claims 1-41 were previously pending. Claims 42-100, being directed to non-elected subject matter, are withdrawn from consideration. By this paper, claims 1, 2, 40 and 41 are amended, claims 4, 6, 8, 10, 12, 14, 16, and 18 are cancelled, and new claims 101-107 are added without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents. No new matter is added. It is respectfully submitted that the claims herewith and the claims as originally presented are and were in full compliance with the requirements of 35 U.S.C. §§101, 102, 103 and 112. Support for the amended claims and the new claims is found throughout the specification and in the originally filed claims. Specifically, support for the new claims is found on pages 22 to 26 of the specification in the section entitled "Device" and also on pages 9-10.

II. OBJECTIONS TO THE CLAIMS

Claims 4, 6, 8, 10, 12, 14, 16 and 18 have been objected to under 37 CFR 1.75 as being a substantial duplicate of claims 3, 5, 7, 9, 11, 13, 15 and 17, respectively. By this paper claims 4, 6, 8, 10, 12, 14, 16 and 18 are hereby cancelled. Accordingly, reconsideration and withdrawal of the objections to the claims is respectfully requested.

III. REJECTIONS UNDER 35 U.S.C. §101 AND §112, FIRST PARAGRAPH

Claims 1-40 were rejected under both 35 U.S.C. §101 and §112, first paragraph. The Office Action alleged that these claims are not supported by a specific, substantial or credible utility and that therefore one skilled in the art would not know how to use the claimed invention. These rejections are based on the Examiner's contention that the methods the present invention do not in fact induce retrodifferentiation of cells, but instead work by some other mechanism, such as by selectively inducing apoptosis in committed cells. Applicants disagree and traverse this rejection. The specification provides ample evidence that the methods and devices of the present invention do indeed induce retrodifferentiation, and thus the methods and devices of the present invention are supported by a specific, substantial and credible utility. However, in order

to advance the prosecution of the present application, the claims are hereby amended to recite devices, means, and agents for "increasing the relative number of undifferentiated cells" in a cell population. Accordingly, reconsideration and withdrawal of the rejections of the claims under 35 U.S.C. § 101 and §112, first paragraph, are respectfully requested.

IV. ADDITIONAL REJECTIONS UNDER 35 U.S.C. §112, FIRST PARAGRAPH

Claims 9 and 10 stand were rejected under 35 U.S.C. § 112, first paragraph on the basis that the term "miniaturized" is relative and vague and therefore renders the claims indefinite, and also on the basis that the specification does not provide any written description of a "miniaturized" coulter counter". By this paper claim 9 has been amended to delete the word "miniaturized" and claim 10 has been canceled. Accordingly, reconsideration and withdrawal of the rejections of claims 9 and 10 under 35 U.S.C. § 112, first paragraph is respectfully requested.

V. REJECTIONS OF THE CLAIMS UNDER 35 U.S.C. §102(b)

Claims 1-4 and 15-41 were rejected under 35 U.S.C. § 102(b), as being anticipated by Gruenberg (U.S. Patent No. 5,627,070). The Examiner contends that Gruenberg describes a cell growing device having all of the structural features recited in the present claims, and that the present invention provides only a novel use of a known device. This rejection is traversed. The claims presented herein are directed to a novel device having novel features not taught or suggested by Gruenberg. For example, the device of Gruenberg contains cell growth chambers that are capillary tubes and which do not contain mixing means for mixing cells with an added agent, unlike the device presently claimed. Additionally, the device of Gruenberg does not contain the novel combination of features recited in new claims 101-107. Accordingly, reconsideration and withdrawal of the rejections of the claims under 35 U.S.C. § 102(b) is respectfully requested.

VI. REJECTIONS OF THE CLAIMS UNDER 35 U.S.C. §103(a)

Claims 1-10 and 15-41 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over the combination of Gruenberg and Von Behrens (WO 93/16384). The Office Action asserts that it would have been obvious to combine the device of Gruenberg with the coulter counter of Von Behrens to produce the claimed device. This rejection is respectfully traversed. As described above, Gruenberg fails to teach the elements of the presently claimed device. The teaching of Von Behrens fails to remedy this deficiency. Thus, the present claims

are not rendered obvious by the combination of Gruenberg and Von Behrens, regardless of whether or not the claimed device contains a coulter counter. Accordingly, reconsideration and withdrawal of this rejection of the claims t under 35 U.S.C. § 102(a) is respectfully requested.

The Office Action also rejected claims 1-4 and 11-41 as obvious over the combination of Gruenberg and Hochman (U.S. Patent No. 5,976,825). Hochman allegedly teaches a drug screening device containing motor driven syringes, and the Office Action asserts that it would be obvious to combine the device of Gruenberg et al with the motor driven syringes of Hochman to produce the device of the present invention. This rejection is respectfully traversed. As described above, Gruenberg fails to teach the elements of the presently claimed device. The teaching of Hochman fails to remedy this deficiency. Thus, the present claims are not rendered obvious by the combination of Gruenberg and Hochman, regardless of whether or not the claimed device contains a motor driven syringe. Accordingly, reconsideration and withdrawal of this rejection of the claims t under 35 U.S.C. § 102(a) is respectfully requested.

CONCLUSION

In view of the remarks and amendments herewith, the application is believed to be in condition for allowance. Consideration of this paper, reconsideration and withdrawal of the rejections of the application, and prompt issuance of a Notice of Allowance are earnestly solicited.

Respectfully submitted,
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